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Item 7 of the provisional agenda

**COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS**

**Submissions from Parties**

**Note by the secretariat**

1. At its fourteenth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) endorsed the formation of a joint liaison group between the secretariats of the UNFCCC and the Convention on Biological Diversity and requested the secretariat of the UNFCCC to invite the secretariat of the United Nations Convention to Combat Desertification to participate in this liaison group in order to enhance coordination between the three conventions, including the exchange of relevant information. The SBSTA invited Parties to submit their further views on cooperation between the three conventions by 15 October 2001 for inclusion in a miscellaneous document (FCCC/SBSTA/2001/2, para. 42 (d) - (f)).
2. Two such submissions<sup>\*</sup> have been received from Parties. In addition, the secretariat of the Convention on Migratory Species provided its views on this issue. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced in the language in which they were received and without formal editing.

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<sup>\*</sup> In order to make these submissions available on electronic systems, including the World Wide Web, they have been electronically imported. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

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PAPER NO. 1: AUSTRALIA

**Cooperation with International Organisations**

**Cooperation between United Nations Framework Convention on Climate Change,  
Convention on Biological Diversity  
and Convention to Combat Desertification**

At its fourteenth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) invited Parties to submit their views on cooperation between the three conventions, United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and the Convention to Combat Desertification (CCD). Australia welcomes the opportunity to comment on the formation of a joint liaison group between these groups.

Australia supports further cooperation and coordination in the work of these three Conventions in order to improve the quality, synergies and comprehensiveness of analyses considering the interlinkages between climate change, biodiversity and desertification.

While we see the UNFCCC, CBD and CCD Secretariats forming the core of the joint liaison group there may be benefit in involving Secretariat staff of other bodies such as the Intergovernmental Panel on Climate Change (IPCC), the Global Change and Terrestrial Ecosystems program and the Millennium Ecosystem Assessment, as and when appropriate.

**Role of the joint liaison group**

The three Secretariats should develop terms of reference to help focus the work of the joint liaison group prior to the group commencing work.

The joint liaison group should aim to optimise information sharing amongst the bodies represented. However, this core function should be guided by the following factors, including the need to:

- build secretariat capacity to perform their functions, including providing high quality advice to Parties;
- focus on issues where greatest overlap occurs on the issues of climate change, biodiversity and desertification;
- add value to work that is already being undertaken while minimising, duplication of activity;
- assess information gaps related to the interlinkages between climate change, biodiversity and desertification; and
- elucidate less understood policy and technical issues where possible.

The activities of the joint liaison group should be reported on a regular basis to the Conferences of the Parties to the three conventions. Where appropriate the reports could contain recommendations for action to strengthen and streamline coordination between conventions.

### **Assessment of existing activities**

An important initial role for the joint liaison group is to take stock of existing activities that are considering the interlinkages between biodiversity, climate change and desertification. This requires an assessment of the work of the three conventions and other international organisations. A preliminary list of activities is at Attachment A.

A workshop coordinated by the joint liaison group involving representatives of the relevant bodies, including those listed above, may be a useful first step to assess existing activities. Such a workshop would allow:

- exploration of areas of common interest;
- opportunities for collaboration; and
- identification of areas of duplication/overlap and gaps.

**PRELIMINARY ACTIVITIES CONSIDERING INTERLINKAGES BETWEEN CLIMATE CHANGE, BIODIVERSITY AND DESERTIFICATION.**

- **The CBD Ad Hoc Technical Experts Group on Forest Biological Diversity** has considered climate change as a specific threat to forest biological diversity. A note prepared by the CBD Executive Secretary synthesises information on the impacts of climate change on forest biological diversity; forest management and carbon sequestration; and proposed options for the integration of conservation and sustainable use of forest biological diversity with respect to the provisions of the UNFCCC and its Kyoto Protocol (UNEP/CBD/SBSTTA/7/7).
- **CBD Ad Hoc Technical Experts Group on Biodiversity and Climate Change** At their first meeting, 26-30 November 2001, this experts group will:
  - review existing information on the interlinkages between biological diversity and climate change and identify gaps; and
  - review existing tools to facilitate the use of scientific advice for the integration of biodiversity considerations into the implementation of mitigation/adaptation measures under the UNFCCC and Kyoto Protocol. (UNEP/CBD/SBSTTA/7/2)
- The CBD have invited the IPCC to complete a **Technical Paper: Climate Change and Biological Diversity** as a contribution to a pilot assessment being undertaken by the CBD Biodiversity and Climate Change experts group. The paper is to include information on observed changes in terrestrial and marine ecosystems associated with climate change; projected impacts of changes in climate on terrestrial and marine ecosystems; impact of changes in biodiversity on climate; mitigation options for climate change and its impacts on biodiversity; potential for conservation and sustainable use of biological diversity that could contribute to climate adaptation measures; and information and assessment gaps.
- The ongoing assessment work of the IPCC covers, to some extent, the interlinkages between climate change, biodiversity and desertification.
- **Global Change and Terrestrial Ecosystems**, a core project of the International Geosphere-Biosphere Programme, focuses on determining the relationship between ecological complexity and ecosystem functioning; evaluating how global change affects biodiversity and ecological complexity; and elucidating the consequences of these effects for policy and resource management.
- The CBD has requested the **Millennium Ecosystem Assessment** (MEA), consider the interlinkages between climate change and biodiversity. This group was launched by the United Nations, scientific groups, governments, foundations, and other international agencies, in July 2001.

PAPER NO. 2: NORWAY

**Views on cooperation between the Framework Convention on Climate Change (FCCC), the Convention on Biological Diversity CBD and the Convention to Combat Desertification (CCD)**

Norway appreciates the opportunity to address cooperation between the three conventions on climate change, biological diversity and desertification. Norway is party to all conventions, and believes that the common objective of sustainable development gives opportunities for synergies between the three conventions. The conventions address environmental and social challenges that are closely linked, and the development of unified approaches, both at the national and international level, will in our view represent a useful step forward, also bearing in mind the differentiated responsibilities of the parties to the three conventions. Especially with respect to the needs of developing countries, effective collaboration can ensure that duplication of effort and resources is avoided.

This submission is divided into four parts:

- i) an overview of ongoing work related to climate change and biodiversity, which may form a basis for action in this field,
- ii) the interlinkages between the climate convention, the convention on biological diversity and the convention to combat desertification,
- iii) issues of common interest and importance to the conventions and where a strengthening of cooperation is needed
- iv) suggestions for further work to enhance cooperation between the conventions.

**I. Ongoing work related to climate change and biodiversity**

As mentioned in Norway's submission on this matter to SBSTA 14, it is important that biodiversity concerns are taken into account in the implementation of the UNFCCC and the Kyoto protocol. Two processes are going on to address scientific and policy related matters to climate change and biodiversity: Preparation of the Technical Paper to be completed by the IPCC in mid-April 2002, and the pilot assessment to be undertaken by the ad hoc technical expert group established by the CBD.

These ongoing processes will no doubt contribute with important knowledge on how to integrate considerations of biodiversity into the work of the UNFCCC. However, the presence of scientific and technological advice alone does not ensure a satisfactory incorporation of these considerations into the work of the UNFCCC. Thus, there may be a need for more formalised cooperation and preparation of future decisions on implementation of these matters.

**II. The relationship between the UNFCCC, the CBD and the CCD**

The findings in the IPCC TAR show that climate change is likely to exacerbate desertification processes in a number of countries at risk in tropical arid and semi-arid areas. Desertification can

be described as the results of land degradation in arid and semi-arid land areas, where overgrazing, deforestation, poor irrigation practices and overcultivation may be proximate factors. However, the processes are very much influenced by climatic factors such as the occurrence and severity of droughts. Many of the countries subject to desertification are developing countries with limited resources to counteract desertification or mitigate climate change effects. This calls for urgency in the work of the UNFCCC to counteract climate change, and also for concern about mitigation and adaptation measures that contribute to sustainable development in the long term.

The CBD and CCD are already in the process of developing a joint work programme to address common objectives of the two conventions. The main areas of work concern assessments of status and trends, build-up of knowledge, identification and dissemination of best management practices and promotion of specific measures for the conservation and sustainable use of the biological diversity of dry and sub-humid lands. Results from this work can no doubt be of value for developing joint areas of action between the UNFCCC and the other two conventions.

The CCD also calls for closer collaboration with the UNFCCC, particularly with respect to LDCs. The secretariats of the two conventions are in the process of developing a joint work programme, aimed at developing synergies by *inter alia* examining adaptation strategies and aligning interests at the local level (cf. ICCD/COP (5)/6).

Norway sees the National adaptation programmes of action (NAPAs) developed under the UNFCCC and the National action programmes developed under the CCD (NAPs) as potential areas of cooperation. The development of common guidelines for the NAPAs/NAPs on relevant issues could be a step forward to increase coordination.

### **III. LULUCF-activities and relations to biodiversity**

LULUCF-activities will be treated in a separate chapter in the IPCC Technical Paper (chapter IX, IPCC 18 Document 4(f), rev.1). Norway welcomes this separate treatment of an important issue regarding climate change and biodiversity.

Considerations of biological diversity are particularly relevant in the implementation of LULUCF-activities, especially concerning afforestation and reforestation projects under Article 12 of the Kyoto protocol. Issues of concern are:

- The possibility of displacement of native non-forest species due to afforestation or reforestation
- The types and management of plantations and whether dispersal of plantation species will constitute a risk to local biological diversity, bearing in mind the ecosystem approach of the CBD
- The types and management of plantation with regard to social development
- The consideration of different biodiversity qualities of primary and secondary forest, or different forest types. Such a differentiation is necessary to be able to evaluate the implications for biodiversity with respect to both deforestation and reforestation/afforestation.

Clearer guidance on land use, land use change and forestry activities, how their implementation may affect biological diversity and how negative effects can be avoided should be developed in conjunction with the CBD. Benefits in this regard can be obtained from the work done within the international arrangement on forests, both the United Nations Forum on Forests (UNFF) and the Collaborative Partnership on Forests (CPF). The CBD secretariat and the FCCC secretariat are both members of the CPF together with the major international organisations and institutions engaged in forest issues. Guidelines, recommendations or criteria developed should be based on sound science, and be consistent with the principles guiding LULUCF-activities. Scientifically based criteria and indicators for sustainable forest management have been developed and implemented in many countries. In addition, market driven tools such as forest certification have been developed in the forestry sector in both Scandinavia and the tropics, and the experience with such criteria, indicators and tools may be taken into consideration for the development of norms or guidelines for biodiversity considerations in LULUCF-activities. Attention may also be given to development of criteria taking social considerations into account. Another policy tool is environmental impact assessment, which can take into account a broader range of environment and sustainability questions. The work of IPCC in its Technical Paper and of the ad hoc technical expert group under the CBD will contribute to more thorough considerations of the applicability and significance of the various approaches.

#### **IV. CDM-projects and the implications of biodiversity and desertification concerns**

Projects under Article 12 of the Kyoto protocol can in several ways have implications for biological diversity and desertification. Measures that contribute to the removal of greenhouse gases through reforestation and afforestation, can also combat land degradation. Under the convention to combat desertification, revegetation is another example of such measures. Measures that combine energy supplies, ensuring that local community needs for resources are met, with the preservation of biodiversity, are particularly relevant in areas of desertification. The extent to which such measures meet common objectives of the three conventions should be further explored.

The types of LULUCF-activities for future commitment periods should be explored in more detail in order to address both environmental and social consequences. Agroforestry may, for example, constitute a LULUCF activity that can implement both the goals of contributing to biodiversity and combating desertification in a better way than plantations or conventional agriculture.

#### **V. Suggestions for further work**

Enhanced coordination between the three conventions can ensure that policies and measures are developed to take full advantage of the potential for synergy effects, while counteractive measures are avoided. To help achieve this, the exchange of information and a common approach to capacity building and technology transfer are important areas of cooperation, particularly with respect to developing countries.

Norway suggests that the SBSTA takes the initiative to collaborate with the SBSTTA of the CBD, the CCD and the IPCC to convene a joint workshop addressing the interlinkages between



climate change, biological diversity and desertification, with the aim of presenting to the Conference of the Parties advice on:

- LULUCF-activities, including
  - (a) the use of screening procedures or indicators/criteria contributing to the goal of biological diversity and sustainable development
  - (b) the use of strategic or environmental assessment procedures to ensure the long term sustainability of CDM-projects
- mitigation measures to address adverse effects of climate change particularly related to biodiversity loss and desertification
- the possibility of synergy effects of mitigation measures
- coordination of efforts and resources at the national level
- future development of joint workshops and/or work programmes

Also, as the decision in document FCCC/CP/2001/L.11/Rev.1 calls for definitions and modalities regarding afforestation and reforestation projects under Article 12 to be adopted at COP 9, the workshop could contribute to the basis for this decision.

A joint workshop between the conventions should take place after the IPCC Technical Paper is completed, to be able to draw on the results presented in the Technical Paper. The ad hoc expert group established under the CBD should be invited to contribute to the workshop.

### PAPER NO. 3: CONVENTION ON MIGRATORY SPECIES

#### **Climate Change and Migratory Species**

Living systems in our planet are facing an ever-increasing number of continuous and serious threats. In addition to habitat destruction, fragmentation and modification, over-harvesting, unsustainable practices, pollution and others, climate change constitute a serious environmental threat that affects fundamental aspects of our existence, including the survival of species. Significant scientific evidence underscores that climate change directly affects the world's biodiversity. Biological responses reported, include for example the lengthening of the growing season and changes in phenology such as earlier flowering of trees and egg-laying in birds.

Many species and ecosystems are not able to adapt to the changes in habitat quality. According to an impact scenario produced by WWF the rapid rates of global warming are likely to increase rates of habitat loss and species extinction, most significantly in the higher latitudes of the Northern Hemisphere. Moreover, the impact is expected to be non-linear, which means they are particularly severe when certain thresholds are crossed. Certain ecosystem types are more vulnerable to such thresholds than others. Mangrove ecosystems, temperate and boreal forests, tropical montane cloud forests, coastal marshes, alpine/high montane systems and arctic ecosystems are among those more vulnerable systems, as are wetlands overlying permafrost. These ecosystems are of great importance as breeding, wintering or resting grounds for many migratory species. In the case of coral reefs, even short-term water temperature increases of no more than 1-2 °C cause irreversible bleaching, while sustained increases of 3-4°C generate significant coral mortality.

In general, climate changes create additional stress to those ecosystems and species that are affected by habitat fragmentation. A fragmented habitat presents a barrier to migration and thus to adaptation by moving to other areas, which in turn may lead to low genetic diversity and increased vulnerability. Furthermore, ecosystem degradation also decreases the resilience of ecosystems to climate change.

For migratory species, changes in climate and the natural environment cause particular risks, since migratory animals require separate breeding and wintering habitats in addition to stop-overs along their migration routes. Studies and reports are already showing some very significant effects of global warming on migratory species of several taxa. A few examples may illustrate this:

in Canada, for the last 10 years spring has come earlier than expected. Female caribou, migrating to small pockets of vegetation to feed and raise their calves in spring, found their principal food plant had already gone to seed by the time they reached the coastal plain.

Off the coast of Alaska, global warming has altered fish migration patterns so that sea lions and seals have moved away. This caused killer whales to hunt sea otters instead. In turn, the loss of sea otters sets off a chain reaction that destroys kelp beds, an important habitat for many ocean species.

At the 10<sup>th</sup> Scientific Council meeting of the Convention on Migratory Species (May 2001), Dr. Colin Limpus, an international expert on Marine Turtles, reported on the impact that unusually high temperatures in 1998 had on turtles in South East Asia. In turtles, breeding success largely depends on the temperature of the nesting beach: if the sand temperature exceeds 32 degrees Celsius, the eggs will not hatch. Also, sex determination is influenced by temperature; with higher temperatures causing the hatching of only females. In 1998, unusually hot temperatures caused a 20 percent reduction of hatching success of green turtles and hawksbill turtles. So far, this has been reported as a rare event, but climate experts warn that in 20 or 30 years this could be a very common phenomenon, which would affect a number of South East Asian nesting beaches. All the more important it will be to preserve the appropriate natural vegetation (shading) for these important beaches.

Regional climate events such as La Niña have been linked to the population performance of dugongs and green Turtles. The wet La Niña years produce flooding that washes sediment and pollution down the rivers and into the sea grass pastures. Also, increased storms contribute to an increased erosion of sea grass pastures, thus affecting the survival rates of the populations of these 2 species.

In February 2001, researchers from the Koenig Museum of Zoology in Bonn made an interesting discovery : they found that migratory birds such as cranes, geese and other water birds, were already returning to Germany in early February. Cranes are leaving their breeding grounds about two months later and returning six weeks earlier than they did 20 years ago. Some migratory bird species are increasingly remaining in their central European breeding sites over the winter. The weather related clues for migration are changing and as a consequence the behavior of migratory species is being severely affected. This behavioural changes in turn have direct impacts on the habitats (as they become depleted) and ultimately on the species survival.

Arctic bird populations are at a particular risk due to global warming, according to a WWF study. As higher temperatures cause wooded forests to advance northward, they replace the Arctic tundra, an essential breeding area for millions of birds. More than two-thirds of all geese and nearly 95 percent of all calidrid waders breed in the Arctic. The study forecasts that a 40 percent to 57 percent loss of tundra in the next 100 years may mean a loss of habitat for 5 million geese and 7.5 million calidrid waders.

In Europe and in North America, over the past 30 to 100 years, butterflies are shifting their boundaries northwards as it is the case for the monarch butterfly, an Appendix I species of the Bonn Convention. Rising temperatures are affecting the survival at the southern extreme of their ranges.

Coral reefs and the fish living in the reefs are at a particular risk. Researchers fear that global warming could eliminate corals from most areas of the world by 2100. This could potentially destroy the habitats of a quarter of all marine fish species, including migratory fish.

These examples clearly show that international initiatives are urgently needed to coordinate research on the interlinkages between biological diversity and climate change.

Some initiatives have already been started by CMS, IWC (International Whaling Commission), CBD (Convention on Biological Diversity) and UNFCCC (United Nations Framework Convention on Climate Change). For example, the IWC established a working group on recent changes in migratory routes of cetaceans off the coast of Chile in relationship with sea temperature changes.

The joint liaison group among the secretariats of the UNFCCC, the CBD and the CCD established to enhance coordination, exchange information and develop a work plan, needs to incorporate in its agenda the impact of climate change on migratory species. The Convention on Migratory Species stands ready to participate and make contributions to the work of this Joint Liaison Group.

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